CLAIMS

1. (Currently Amended) A porous particulate composition comprising a matrix of one or more catalytic components and at least one polymer having a plurality of covalently bound free olefin groups, wherein the catalyst component is an organometallic complex selected from the group consisting of Group 3-10 metals, non-metals, lanthanide metals, actinide metals and combinations thereof; and wherein the matrix is formed by reaction of the one or more catalytic components and the free olefin groups of the polymer.

2. (Currently Amended) The composition of claim 1, wherein the at least one polymer having a plurality of covalently bound free olefin groups is a macroporous polymer prepared in the presence of a porogen and is selected from the group consisting of divinylbenzene polymers, divinylbenzene copolymers, styrene/divinylbenzene copolymers, divinylbenzene resins, cross-linked divinylbenzene polymers, styrene/butadiene copolymers, styrene/isoprene copolymers, vinylsiloxane polymers, [[alkylsiloxane polymers,]] allylsiloxane polymers, [[condensation products of siloxane polymers having a plurality of olefin groups]] and combinations thereof.

3. Cancelled

4. (Currently Amended) The composition of claim 1, wherein the matrix further comprises one or more olefin polymerization catalyst components selected from the group consisting of: Ziegler-Natta catalysts, metallocene complexes of Group 3-10 metals, metallocene complexes of non-metals, metallocene complexes of lanthanide metals, metallocene complexes of actinide metals, single-site catalysts, single-site metallocene catalysts and combinations thereof, and at least one activator component [[and is used for polymerizing at least one olefin monomer selected from the group consisting of unbranched aliphatic olefins having from 2 to 12 carbon atoms, branched aliphatic olefins having from 4 to 12 carbon atoms, unbranched and branched aliphatic α-olefins having from 2 to 12 carbon atoms, conjugated olefins having 4 to 12 carbon

atoms, aromatic olefins having from 8 to 20 carbons, unbranched and branched cycloolefins having 3 to 12 carbon atoms, unbranched and branched acetylenes having 2 to 12 carbon atoms, and combinations thereof]].

5. (Previously Amended) The composition of claim 1, wherein the matrix is selected from the group of formulas consisting of: $[Cp^1Cp^2MR_x\ L]^+\ [NCA]^-$, wherein M is a Group 4 metal, Cp^1 is a substituted or non-substituted cyclopentadienyl ring and Cp^2 is the same or different, substituted or non-substituted cyclopentadienyl ring and may be bridged symmetrically or asymmetrically to Cp^1, R is hydride, alkyl, silyl, germyl or an aryl group, x is an integer equal to 0 or 1, L is formed by reaction of the Group 4 metal complex and the free olefin groups of the polymer and NCA is a non-coordinating anion; $[Cp^1Cp^2MR]^+\ [NCA]^-$, wherein M is a Group 4 metal, Cp^1 is a substituted or non-substituted cyclopentadienyl ring and Cp^2 is the same or different, substituted or non-substituted cyclopentadienyl ring and may be bridged symmetrically or asymmetrically to Cp^1, R is a hydrocarbyl group formed by reaction of the Group 4 metal complex and the free olefin groups of the polymer and NCA is a non-coordinating anion; $[Cp^1MR_xL]^+\ [NCA]^-$, wherein M is a Group 4 or 6 metal, Cp^1 is a substituted or non-substituted cyclopentadienyl ring, R is a hydride, alkyl, silyl, germyl or an aryl group, x is an integer ranging from 0 to 6, L is formed by reaction of the Group 4 or 6 metal complex and the free olefin groups of the polymer and NCA is a non-coordinating anion; $[(Multidentate)MR_xL]^+\ [NCA]^-$, wherein M is a Group 4 or 6 or 8 or 9 or 10 metal, R is hydride, alkyl, silyl, germyl, aryl, halide or alkoxide group, x is an integer equal to 0, 1 or 2, multidenate is a bidentate, tridentate or tetradentate ligand containing nitrogen, sulfur, phosphorus and/or oxygen as coordinating atoms to the metal, L is formed by reaction of the Group 4 or 6 or 8 or 9 or 10 metal complex and the free olefin groups of the polymer and NCA is a non-coordinating anion; $(Multidentate)MR_xL$, wherein M is a Group 4 or 6 or 8 or 9 or 10 metal, R is hydride, alkyl, silyl, germyl, aryl, halide or alkoxide group, x is an integer equal to 0, 1 or 2, multidenate is a bidentate, tridentate or tetradentate ligand containing nitrogen, sulfur, phosphorus and/or oxygen as coordinating atoms to the metal and L is formed by reaction of the Group 4 or 6 or 8 or 9 or 10 metal complex and the

free olefin groups of the polymer; $(Cp^1)_x(Cp^2)_yMR_xL^+[NCA]^-$, wherein M is a lanthanide or an actinide metal, R is hydride, alkyl, silyl, germyl, aryl, halide, alkoxide, amide or solvent ligand, R may also be a bidentate ligand containing nitrogen, sulfur, phosphorus and/or oxygen, x = 0-2, y = 0-2, L is formed by reaction of the lanthanide or actinide metal complex and the free olefin groups of the polymer and NCA is a non-coordinating anion and combinations thereof.

6. Cancelled

7. Cancelled

8. Cancelled

9. Cancelled

10. Cancelled

11. Cancelled

12. Cancelled

13. Cancelled

14. Cancelled

15. Cancelled

16. Cancelled

17. Cancelled

18. Cancelled

19. Cancelled

20. Cancelled

21. (Previously presented) A porous particulate composition comprising a matrix of at least one macroporous polymer having a plurality of free olefin groups selected from the group consisting of: divinylbenzene polymers, divinylbenzene copolymers, styrene/divinylbenzene copolymers, divinylbenzene resins, cross-linked divinylbenzene polymers, styrene/butadiene copolymers, styrene/isoprene copolymers, vinylsiloxane polymers, allylsiloxane polymers and combinations thereof; and at least one Ziegler-Natta catalyst, wherein the matrix is formed by reaction of the at least one Ziegler-Natta catalyst and the free olefin groups of the polymer.

22. (Previously presented) The porous particulate composition according to claim 21, wherein the Ziegler-Natta catalyst comprises at least one titanium compound, at least one magnesium compound and at least one aluminum compound.

23. (Previously presented) A porous particulate composition comprising a matrix of at least one macroporous polymer having a plurality of free olefin groups selected from the group consisting of: divinylbenzene polymers, divinylbenzene copolymers, styrene/divinylbenzene copolymers, divinylbenzene resins, cross-linked divinylbenzene polymers, styrene/butadiene copolymers, styrene/isoprene copolymers, vinylsiloxane polymers, allylsiloxane polymers, and combinations thereof; and at least one catalyst further comprising at least one chromium compound and at least one silicon compound, wherein the matrix is formed by reaction of the at least one catalyst and the free olefin groups of the polymer.

Interview Pursuant to 37 C. F. R. §1.133

Applicants thank the Examiner for an interview of October 26, 2004. Rejection to amended claim 3 was discussed with Examiner. Support for amendments to claims 1-6 was discussed with Examiner and claims 21-23 were also discussed with Examiner. Examiner agreed to examine amended claims on their merits and to examine claims 21-23.

Response to Advisory Action

Claims 1-6 have been rejected under 35 U.S.C. §112, first paragraph as failing to comply with the written description requirement. Examiner cites issues with only claim 3. Applicants respectfully submit the rejection is improper for claims 1, 2 and 4-6 under the statute. In such a rejection, the examiner should explain all the reasons why nothing within the scope of claims noted is enabled. To make sure all relevant issues are raised, this should include any issues regarding the breadth of the claims relative to the guidance of the disclosure (MPEP 706.03(c),7.31.02, 2162). Further, the examiner has the burden of presenting specific reasons for each claim why persons skilled in the art would not recognize the applicant's disclosure a description of the invention defined by each claim (MPEP 2163.04). The examiner must identify for each claim the claim limitation not described. Applicants respectfully traverse the rejection and contend the amendments made to independent claim 3 obviates the Examiner's rejection. Applicants have cancelled claims 3 and 6 without prejudice.

The previous amendment to claim 1 was to claim polymer having a plurality of free olefin groups from olefin based material having a plurality of free olefin groups. This was in agreement with the previous examiner of record during an interview dated February 17, 2004. Examiner has not met the burden of indicating specifically how the amendment is not supported in the written description or not contained from the support the Applicants have previously documented. Likewise, examiner has not met the burden of indicating specifically how the amendments to dependent claims 2 and 4-6 is not

supported in the written description or not contained from the support the Applicants have previously documented.

Applicants have amended claims 1, 2, and 4 to further clarify the Applicants invention.

Support for Amendments

Claim amendments are fully supported in the specification. Amendments to claim 1 of the olefin based material being a polymer having a plurality of covalently bound free olefin groups is found in the summary of the invention at page 3, lines 27-29, in the section of the specification under olefin based materials at page 7, lines 24 to 26; at page 8, line 30 to page 9, line 32 and at page 11, lines 9 to 26. The amendment of one or more catalytic components was added for proper antecedent basis in claim 1. In addition, support for one or more catalytic components is found at page 3, lines 17-18 and at page 5, lines 15 to 17. The catalytic components were unchanged from the originally filed and examined claims.

Claim 2 was amended to remove alkyl siloxanes and condensation products of siloxane polymers having a plurality of olefin groups. The amendments of at least one polymer was added proper antecedent basis in claim 1. Amendments to claim 1 of the olefin based material being a polymer having a plurality of covalently bound free olefin groups is found in the summary of the invention at page 3, lines 27-29, in the section of the specification under olefin based materials at page 7, lines 24 to 26; at page 8, line 30 to page 9, line 32 and at page 11, lines 9 to 26.

Claim 4 was amended to remove the types of olefins polymerized used the matrix. The catalytic components were unchanged from the originally filed and examined claims.

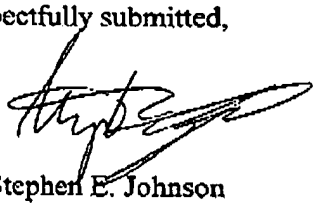
Amendments to claim 6 of the polymer having a plurality of free olefin groups particle diameter was corrected to particle size as found at page 9, lines 6 to 8. Support for the polymers having a plurality of covalently bound vinyl groups in the section of the

specification under olefin based materials at page 7, lines 24 to 26; at page 8, line 30 to page 9, line 32 and at page 11, lines 9 to 26.

Applicants point out that previously added claims 21-23 are indeed with the scope of claim 1, are not a different invention and are written as independent claims specifically limiting the organometallic complex of a Group 4 metal (Ti) as claim 21 or a Group 9 metal (Co) as in claim 23. Support for previously added claim 21 is found at page 4, lines 8 to 12; at page 2, line 31 to page 3, line 1; at page 3, lines 8 to 9; at page 23 (Example 9); at page 7, lines 27 to 29; at page 8, line 30 to page 9, line 32 and at page 11, lines 9 to 26. Support for previously added claim 22 is found at page 4, lines 10 to 12 and at page 23 (Example 9). Support for previously added claim 23 is found at page 4, lines 10 to 12; at page 2, line 31 to page 3, line 1; at page 3, lines 8 to 9; at page 23 (Example 9); at page 7, lines 27 to 29; at page 8, line 30 to page 9, line 32 and at page 11, lines 9 to 26.

If the Examiner finds that there are some remaining issues to be resolved, Applicants would appreciate the Examiner to grant them a discussion or another interview pursuant to 37 C. F. R. §1.133, to clarify any issues and to place the Application in better condition for allowance. Please charge any fees associated with this response to Deposit Account No. 18-1850. Applicants invite the Examiner to contact the undersigned to discuss any issues related to this application by telephone.

Respectfully submitted,



Dr. Stephen E. Johnson
Attorney/Agent for Applicants
Reg. No. 45,916
Telephone: (215) 619-5478
Facsimile: (215) 619-1642

Rohm and Haas Company
100 Independence Mall West
Philadelphia, PA 19106-2399
June 23, 2005